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Admiral R. H. Manners, Secretary, in the Chair.

On the Conjunctions of the Planets Jupiter and Saturn in the Years B.C. 7, B.C. 66, *and* A.D. 54. By the Rev. C. Pritchard, M.A., F.R.S.

In this paper the author has corrected an astronomical error, into which Dr. Ideler and several others have fallen, in attempting to establish the date of the true *Annus Domini.* The German chronologist, in his *Handbuch der mathematischen und technischen Chronologie*, has remarked, that certain conjunctions of the planets *Jupiter* and *Saturn* wholly fulfil the conditions and phenomena recorded of the star of the Magi. It asserts that of three conjunctions which occurred in the year B.C. 7, the first was of a nature sufficient to arouse the attention of the Magi, and send them on their errand to Jerusalem, and that the last of the three conjunctions was so close that, to weak eyes, the discs of the two planets might appear diffused into one, and would satisfy, moreover, the condition of being in a proper position at sunset to conduct the Magi from Jerusalem to Bethlehem.

In order to ascertain the accuracy of this statement, the author undertook the computation of the geocentric places of the two planets for the year B.C. 7, so far as any possible conjunctions were concurrent. The result is, that as regards the fact of there having been three conjunctions during the year, Dr. Ideler's statement is confirmed; but the author finds that the dates assigned by Ideler to these conjunctions are not correct; still less is it true that any such proximity occurred as to make it possible that the planets could, to any observer, have presented the appearance of a single star.

The following are the places of the planets for each of the three conjunctions, as computed by the author.

December 4, B.C. 7, at 6 p.m., Paris mean solar time.
Sun's longitude, 250° 57′ 57″·9.

	Geoc. Long. True Equinox.			Geocentric Latitude.			
	°	′	″	°	′	″	
Jupiter	345	30	5·1 ..	1	28	27·9	S.
Saturn	345	33	44 ..	2	31	8·0	S.

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September 29, B.C. 7, at Paris mean midnight.
Sun's longitude, 184° 17′ 7″·6.

	Geoc. Long. ° ′ ″		Geoc. Lat. ° ′ ″
Jupiter	347 35 5	..	1 46 13 S.
Saturn	347 32 20	..	2 44 18 S.

May 29, B.C. 7, at Paris mean midnight.
Sun's longitude, 64° 59′ 15″·4.

	Geoc. Long. ° ′ ″		Geoc. Lat. ° ′ ″
Jupiter	351 1 17·3	..	1 20 57·3
Saturn	350 59 42·7	..	2 19 57·1

From these results it would appear that in a latitude not differing much from that of Jerusalem, on Dec. 4, B.C. 7, the planets would be about 1½ hour east of the meridian at sunset, and would, on May 29, rise about 3½ hours before sunrise.

The author has computed other two ancient conjunctions, one of which occurred in the year B.C. 66, and the other in the year A.D. 54. The distance between the two planets on the occasion of the conjunction in the year 66 was found to be only 55′. With respect to the conjunction of 54 A.D., the planets were too near the sun to be visible.

The results of the author's researches were confirmed by calculations executed independently at the Royal Observatory by the instructions of the Astronomer Royal.

Results of the Observations of Small Planets made at the Royal Observatory, Greenwich, chiefly in July, August, and September, 1856.

Flora.

Mean Solar Time of Observation.		Apparent R.A.	Apparent N.P.D.
	h m s	h m s	° ′ ″
1856, June 28	11 0 21·38	17 29 13·63	109 32 6·96
July 1	10 45 25·30	17 26 4·78	109 38 46·12
2	10 40 28·60	17 25 3·82	109 41 1·33
3	10 35 33·18	17 24 4·14	109 43 18·44
16	9 33 45·70	17 13 21·74	110 14 56·72

Thalia.

Mean Solar Time of Observation.		Apparent R.A.	Apparent N.P.D.
	h m s	h m s	° ′ ″
1856, Sept. 16	14 20 30·60	2 5 20·67	90 3 31·42

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